

Phalaenopsis Culture (fal-en-nop-siss)

Dtps. Taisuco
Stripe



Phalaenopsis, commonly known as moth orchids, are epiphytes (tree-dwelling plants) native to Southeast Asia, the Philippines and Australia. They are the most popular of all the orchids for growing in the average home and have blooming longevity of 2 to 4 months!

The following are the cultural requirements for Phalaenopsis as grown in the upper Midwest.

LIGHT

In the Midwestern climate, Phalaenopsis prefer to be grown in a bright area where they will receive some direct sun. The best exposure is a bright east window where the plant will receive direct sun on the leaves during most morning hours. Western exposure is also suitable, but be sure the plant receives no more than two hours of direct sun daily.

During the winter months, south exposure in the Midwestern latitude is very bright due to the sun being so low on the horizon. The best position for the plant in a southern window would be where it will receive no more than two hours of direct sun daily. More direct sunlight on a Phalaenopsis can damage the leaves.

During the summer months, the south exposure has the opposite effect where the sun's angle is very high, and no direct light is received. You will then need to move the plant to an east or west exposure to ensure proper light levels or move the plant to a shaded outdoor location or supplement light with an artificial plant light. Whichever exposure or light source you choose for growing your Phalaenopsis, try to provide as much light as possible throughout the year without causing sunburn on the leaves. This will ensure the absolute best growth and, subsequently, the best flowering.

Phalaenopsis can also be grown and flowered successfully under artificial plant lights, fluorescent lights, high-pressure sodium or metal halide. Some artificial plant lights produce enough heat to burn the leaves if positioned too close to the plant. When using any artificial plant light source, be sure to arrange the plants under the lights per the needs of the plants.

TEMPERATURE

One of the cultural elements that make the Phalaenopsis such popular plants is that they love to grow in the same temperatures as the average household. On average, these plants grow best between 62 degrees at night to 80 degrees during the day. Of course, we do not heat our homes to 80 degrees

Photos by Chuck Acker



Phal. Japan Heart

during the winter, so too, these plants do not require that much daytime warmth. However, the warmer the daytime temperature, the faster the plant will produce new leaves and subsequently more flowering spikes.

To encourage these plants to produce their flower spike, expose them to cool nighttime temperatures of 58 to 60 degrees for a period of 4 to 6 weeks during the fall or early winter. Typically, the natural cooling of our climate from the summer heat is enough to stimulate a new bloom spike; however, in some cases, the plant will need an extra boost by artificially providing the cooler climate. This can best be achieved by placing your plant in a room that you can reduce the nighttime heat source significantly, such as a downstairs room, a spare bedroom where the heat source can be reduced or even a semi-heated garage area. Remember that the plant still requires daytime light but does not necessarily need it as bright as it did during the growing months. If you do not see a new bloom spike growing out of your plant by January, then you need to continue this cool treatment for just a few more weeks.



Phal. Acker's Bright Spot 'Sparkle'
AM/AOS

WATER

Many factors dictate how often your individual plant will need watering; however, the main rule is that Phalaenopsis like to dry out at the roots between watering. Since these plants grow on trees in their native environment, their roots are accustomed to drying out during each watering cycle. The root of a Phalaenopsis is covered with a fleshy water-retentive material called velamen. The white, silvery velamen around the root absorbs and holds water like a sponge which the plant relies on during the next week or more.

- ***For plants in bark-type mix***, it is essential to allow that mix to become dry beneath the surface before watering again. This is not easy to diagnose by looking at the mix. Probe into the mix with your finger or a sharpened pencil to check water content. Another method is to get familiar with the weight of the pot. When the bark mix is thoroughly dry, the pot becomes very lightweight. In most cases watering your plant, every 7-10 days is standard.
- ***For plants grown in sphagnum moss***, water it less often. Generally, the moss retains moisture for a more extended period than the bark-based mix and therefore, it is crucial to allow the moss to become nearly dry before watering. In most cases watering sphagnum moss can be done once every two to three weeks.



Phal. Fuller's Sunset

To water your Phalaenopsis properly, water the pot thoroughly until water runs freely from the bottom. Usually, this is done at the sink or somewhere you can do a good pot flushing. Remove pot

from any decorative container to allow for proper drainage. Never leave your Phalaenopsis to stand in water, as this will cause root rot. Never use softened water on any of your orchids.

FERTILIZER

Phalaenopsis are actively growing plants, and fertilizer is essential for good growth and flowering.

- **For plants grown in a bark mix**, fertilize every second to third watering with a 30-10-10 formula from January through August. During September through December, use a Blossom Booster 10-30-20 every second to third watering.
- **For plants grown in sphagnum moss**, fertilize once every 2 months using a balanced formula, such as a 20-20-20.

Prepare all your fertilizer solutions by diluting one level teaspoon of fertilizer into one gallon of water. Do not over-fertilize as this will cause permanent root damage.

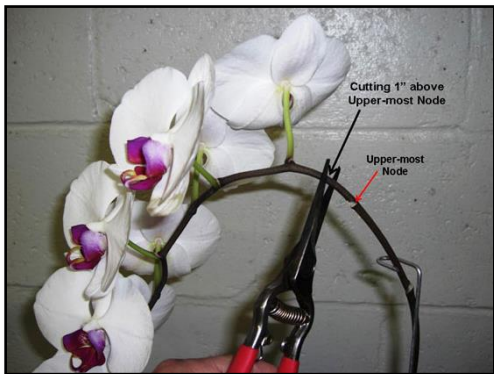
Note: Mix your fertilizer ahead and store it in a plastic container that can be labeled and capped (such as a used gallon milk jug). This ensures the solution is thoroughly diluted, at room temperature, and convenient to use.

HUMIDITY

Like many orchids, Phalaenopsis enjoy a moderately humid climate of 50% or greater. When growing these plants indoors, increase humidity around the plant by placing your plants on a humidity tray, misting them adequately in the morning, or grouping your plants all together in one area.

BLOOMS

Phalaenopsis flower spikes can last 2 to 4 months. Mature plants can be encouraged to flower two times a year by cutting the stem off at a point one inch above the uppermost node.



In essence, you are cutting off only the flowering segment of the stem and leaving the lower portion remaining. This “cropping back” of the stem will promote a new bloom shoot to emerge from one or two of the nodes just below the cut.

After completing this second flowering cycle, cut the entire stem off at the point where it

emerged from the plant.

A new flowering stem will then emerge from the plant, producing the flowers for the next season.



REPOTTING

Phalaenopsis should be replanted every year or year and a half. If you are not experienced or comfortable doing this yourself, call upon someone you know who can help you through the process. A recently purchased Phalaenopsis may be ready for a repotting as soon as it has finished flowering. Inquire with the seller as to when your specific plant was last repotted.

Good indicators for a Phalaenopsis to be repotted are:

1. When the bark has become broken down, rotted or retains moisture for an extended period;
2. When roots are becoming abundant at the surface or outside of the pot; or
3. When the pot is completely root-bound.

It is best to repot during March through October, provided the plant is not blooming at that time. It is possible to repot a Phalaenopsis during flower spike development if undertaken before the buds are visible.

A note about orchid viruses: most commonly, the transmission of orchid viruses is caused by using the same cutting tool on multiple plants. The most effective method to reduce virus transmission from plant to plant is to briefly flame-sterilize your cutting tools between each plant. A simple Butane torch or a gas stove are handy items for this purpose. This practice should be implemented when repotting as well as when cutting off perished flowering stems.

Repot your Phalaenopsis growing in bark mix ,

1. Remove the plant from its pot and let all the existing potting mix fall away from the roots. Once you have all the mixture away from the roots, you can distinguish the good healthy roots from the not-so-healthy, rotted ones. The healthy roots are firm and usually white, green or silver, and the rotted or unhealthy roots are soft, brown and generally mushy. Remove the unhealthy roots using sterilized scissors or pruning tool. Sometimes there are no deteriorated roots to prune away, so you would move on to the next step.
2. Selecting the proper size pot is a crucial aspect of properly repotting. Select a pot that is only large enough to accommodate the roots comfortably. If you need to force the root mass into the pot, it is not quite large enough. A rule of thumb is to use a container that comfortably accommodates the roots. It should be a new pot with adequate drain holes in the bottom and sides.
3. For potting in a bark-based potting mix, set the roots into the pot and begin adding moistened fir bark orchid potting mix. Work the mixture between the roots by gently shaking or tapping the pot to allow the mix fall in between the root crevasses naturally. Position the plant so the junction of the plant and root is at the surface of the mix. Do not bury the plant too deep. Once the pot is nearly full of the bark mix, begin to pack the mix somewhat firmly to anchor the plant



Phal. Little Gem Stripes
(Taisuco Stripe x Taisuco Gem)

properly. Sometimes a blunt tool is needed to firm up the mix. Wait about one week and then water thoroughly, wait one month to fertilize.

Repot your Phalaenopsis growing in moss,

1. Remove a little over half of the old moss from the outer portion of the root ball and remove any dead or rotten roots (see above to determine healthy and non-healthy roots).
2. While holding the root ball with one hand, grab a handful of moistened moss with your free hand and place it against one side of the root ball. Repeat the process for the other side of the root ball until you hold the new moss against the entire root ball with both hands.
3. Having already pre-selected the appropriately sized new pot (see above), use both hands to stuff the root ball into the pot. If you have added too much moss and need force to get the root ball into the pot, remove a little moss to make the insertion process less forceful. Once the root ball is inserted into the pot, push it down far enough to allow a one-half inch margin between the top rim of the pot and the top surface of the moss. This gap will serve as a cup area to fill with water for the watering process. Do not water the freshly repotted plant until the moss has become completely dry.



Phal. Purple Princess 'LHP05'
(Brother Tai x Red Devil)

Chuck Acker

Good luck and Happy Growing!